## MDAR Honey Bee Hive Loss Survey – 2015

# **Beekeeper Information:**

- 321 beekeepers responded from 13 counties
- Keeping bees less than 6 years (70%)
- Currently have or had a mentor in the past (65%)
- Attended bee school (84%)
- Heard about survey from beekeeping group (78%)
- Are not migratory beekeepers but instead manage stationary, local hives (99%)
- Have apiary situated adjacent to vegetation or in natural areas (81%)
- Have other hives in vicinity of apiary (81%) within 2 miles or less (87%)
- Have agricultural areas near the apiary (65%) within 2 miles or less (85%)
- Have wetland or bodies of water near the apiary (94%) within 2 miles or less (99%)

#### **Hive Information:**

- Comprised of Italian (55%), Carnolian (20%), and Russian (12%) bees with queens that are 2 years or less in age (91%)
- Queens were mainly purchased from Massachusetts beekeepers and reared from local hives (48%) or commercial suppliers and beekeepers from another state (35%)
- Started from package bees and nucleus colonies (73%) and 2 years or less in age (74%)
- Managed as Langstroth (85%) using new equipment (64%) and consisting of wood frames/wax foundation (60%)

#### **Hive Management by Beekeepers:**

- Removed 15 or less filled frames of honey stores prior to winter (87%) and left on the same amount for winter feeding (92%)
- Fed common feeds of granulated sugar (25%), Honey Bee Healthy (19%), and homemade sugar patties (18%)
- Applied Varroa mite treatments (63%)
- Used Mite-away Quick Strips (MAQS) (33%), Oxalic Acid (23%), Apiguard (14%), screened bottom boards (15%), and Apivar (9%) as treatments
- Did not do a pre/post count to determine need and effectiveness of mite treatment materials (75%), but those that did relied on the sticky boards (41%), alcohol wash (22%), and sugar shake (25%) as assessment methods
- Used additional chemical treatments in hives consisting of Fumagilin-B (79%), Terramycin (8%), and Tylan (2%)

### **Hive Losses Reported by Beekeepers:**

- All respondents reported having a total of 2,161 hives at the time of completion of the survey and 3,096 hives prior to August 1<sup>st</sup>, 2015 (reduction of 30% in total hive numbers)
- The majority of beekeepers reported losing 1-2 hives (49%) while 33% reported no hive loss (33%)
- Largest levels of hive losses occurred in Plymouth (41%) and Berkshire (33%) counties

Note: All values are either listed as % of respondents and/or % of hives based beekeeper responses.